UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,037	11/26/2003	Jan Klier	200312050-1	7798

22879   7590   02/17/2011
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER
KE, PENG

ART UNIT	PAPER NUMBER
2174	

NOTIFICATION DATE	DELIVERY MODE
02/17/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
laura.m.clark@hp.com

	Application No.	Applicant(s)
Office Action Summary	10/723,037	KLIER, JAN
	Examiner	Art Unit	
	SIMON KE	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *23 November 2011*.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-14,17,18,20,21 and 23-28* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-14, 17-18, 20-21, and 23-28* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communications: Amendment, filed on 11/23/2011

Claims 1-14, 17-18, 20-21, and 23-28 are pending in this application. Claims 1, 11, and

18 are independent claims. In the Amendment, filed on 11/23/2011, claims 1, 4, 8-11, 20, and 24

were amended and claims 27 and 28 were added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in Graham **v.** John Deere Co., 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, 7-10, 11, 12, 13, 14, 17-18, 20-21, and 24-28 are rejected under 35 U.S.C.

103(a) as being unpatentable over de Jong et al. (7,107,534) in view of HD_Speed

(SteelBytes.com) further in view of Erik Riedel, Active Disks-Remote Execution for NASD

(Riedel).

Re claim 1, De Jong et al. discloses an automated storage system comprising:

a data access drive (de Jong, col. 6, lines 28-45) operable to read and write computer-readable data on storage media (de Jong, col. 6, lines 28-45);

a drive controller (de Jong, col. 6, lines 28-45) provided at the data access drive;

computer-readable program code (de Jong, col. 7, lines 20-56) provided in computer-readable storage (de Jong, col. 6, lines 4-20), the computer-readable program code executable (see de Jong, col. 6, lines 25-45, col. 7, lines 55-col. 8, lines 30, fig. 13, col. 9, lines 55; col. 10, lines 25) for generating drive information and user interface rendering data (de Jong, col. 6, lines 60-col. 7, lines 23), wherein drive information comprises a status of the data access drive (see de Jong, fig. 7, col. 9, lines 1-20); and

a user interface module (see de Jong, col. 6, lines –col.7, lines 23) to output the drive information via a user interface in accordance with the user interface rendering data (de Jong, col. 6, lines 60-col. 7, lines 23).

de Jong does not specifically providing computer-readable program code at the data access drive which provides drive information that comprises an operating speed of the data access drive. HD_Speed teaches a GUI application that a user can install on a drive which will display drive information that comprises a status of the data access drive and an operating speed of the data access drive (See Page 1). It would have been obvious to one of ordinary skill at the time of the invention to modify de Jong with the teachings of HD_Speed and include drive information that comprises a status of the data access drive and an operating speed of the data access drive with the motivation to provide the user with better benchmark of their computer's capabilities and to help the user diagnose potential problems with a disk drive.

de Jong _Speed implies that the computer–readable program code is executable by the

drive controller. (see de Jong, col. 6, lines 4-20; server which is the drive controller implicitly

execute part of the graphical out on the client side) Riedel teaches that computer–readable

program code can be executable by the drive controller. (See Pages 1 and 2) It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify de Jong _Speed

with the teachings of Riedel and include the ability to execute code right on the dive controller

with the motivation to improve application performance (See Riedel Pages 1-5).

Re claim 2, de Jong et al. discloses a system, wherein the computer-readable program

code includes a render engine (de Jong col. 10, lines 25-46)) to generate the user interface

rendering data (de Jong col. 10, lines 25-46).

Re claim 3, de Jong et al. discloses a system, wherein the computer-readable program

code includes a state machine (de Jong col. 10, lines 25-46) to retrieve the drive information.

Re claim 4, de Jong et al. discloses a method as set forth in claim 1 above. De Jong et al.

further disclose wherein the drive controller retrieves updated drive information if a data access

drive changes state. (see de Jong, col. 9, lines 1-20)

Re claim 5, de Jong et al. discloses a system, further comprising a communication path

(inherent, de Jong, col.9, lines 1-20) established between the drive controller and the user

interface module, the drive information and the user interface rendering data provided to the user

interface module via the communication path (de Jong, col. 9, lines 1-20).

Re claim 7, Maffezzoni et al. discloses a method as set forth in claim 1 above. De Jong et

al. disclose a communication path established between the drive controller and a system

controller and between the system controller and the user interface module, the drive information

and the user interface rendering data provided to the user interface module via the

communication path. (see de Jong, col. 5, lines 55-col. 6, lines 30)

        Re claim 8, de Jong et al. discloses a system, wherein the drive information and the user

interface rendering data is displayed in a graphical user interface (see de Jong, col. 5, lines 55-

col. 6, lines 30).

        Re claim 9, de Jong et al. discloses a method as set forth in claim 1 above. de Jong

disclose wherein the drive controller retrieves updated drive information based at least in part on

input from the user interface module. (see de Jong, col. 10, lines 25-46)

        Re claim 10, de Jong et al. discloses a method as set forth in claim 1 above. de Jong et al.

disclose wherein the drive controller receives control instructions from the user interface module.

(see de Jong, col. 5, lines 55-col. 6, lines 5)

        Re claim 11, it is rejected under the same rationale as claim 1. de Jong further teaches

receiving an indication of activation of a button in the graphical user interface, wherein

activation of the button is a request for the drive information, and wherein receiving the drive

information and graphical user interface rendering data is in response to the indication of

activation of the button. (see de Jong, col. 10, lines 25-46)

        Re claim 12, de Jong discloses a method as set forth in claim 11 above. de Jong further

teaches disclose wherein receiving the drive information and the graphical user interface

rendering data is via a system controller. (see de Jong, col. 5, lines 55-col. 6, lines 5)

        Re claim 13, de Jong et al. discloses a method of claim 11 wherein receiving the

graphical user interface rendering data comprises receiving the graphical user interface rendering

data from a render engine executed by the drive controller at the data access drive (See Riedel

Pages 1 and 2).

Re claim 14, de Jong discloses a method, wherein outputting the drive information

comprises displaying the drive information in the graphical user interface in accordance with the

graphical user interface rendering data (see de Jong col. 10, lines 23-46).

Re claim 17, de Jong et al. disclose a method as set forth in claim 11 above. de Jong

disclose receiving a second indication of activation of the button in the graphical user interface;

(see de Jong col. 10, lines 23-46).and

outputting updated drive information in the graphical user interface in response to

receiving the second indication. (see de Jong col. 10, lines 23-46).

Re claim 18, it is rejected under the same rationale as claim11. Supra.

Re claim 20, it is rejected under the same rationale as claim 17. Supra.

Re claim 21, de Jong et al. discloses wherein the user interface rendering data enables

drawing of a graphical image in the user interface (see de Jong figure 7).

Re claim 24, de Jong et al. discloses a system wherein the user interface comprises a

graphical user interface, wherein the user interface rendering data comprises a graphical user

interface rendering data, and wherein the user interface module displays the drive information in

a window of the graphical user interface in accordance with the graphical user interface data (see

de Jong figure7).

Re claim 25, de Jong discloses a method as set forth in claim 11 above. de Jong explicitly disclose sending output regarding activation of the button to the drive controller, wherein the drive information and graphical user interface rendering data is generated by the drive controller in response to the output.   (see de Jong col. 10, lines 25-45)

Claim 26 is similar in scope to claim 13; therefore, it is rejected under similar rationale.

Re claim 27, de Jong teaches the limitation of claim 21. de Jong further teaches wherein the graphical image includes a user actuatable button that when actuated causes the computer-readable program code to execute on the drive controller to retrieve the drive information from a module at the drive controller. (see de Jong, col. 10, lines 25-46)

Re claim 28, it is rejected under the same rationale as claim 27. Supra.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over de Jong-HD_Speed-Riedel in view of Matsumoto et al. (20020124124).

Re claim 6, de Jong_Speed-Riedel discloses a method as set forth in claim 5 above. de Jong_Speed-Riedel does not explicitly disclose wherein the communication path is established separate from a data path with the drive controller. However, Matsumoto et al. teaches of wherein the communication path is established separate from a data path with the drive controller (plurality of ports, see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Matsumoto et al. having separate communication path or plurality of ports with the method of de Jong_Speed-Riedel on the in order to provide ability for variety in interaction portals. Furthermore, it would have been an obvious matter to establish communication path that is separate from a data path with the drive controller, since such a modification would have involved the mere application of a known

technique to a piece of prior art. Where a claimed improvement on a device or apparatus is no

more than "the simple substitution of one known element for another or the mere application of a

known technique to a piece of prior art ready for improvement," the claim is unpatentable under

35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing KSR v.

Teleflex, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly Applicant claims

a combination that only unites old elements with no change in the respective functions of those

old elements, and the combination of those elements yields predictable results; absent evidence

that the modifications necessary to effect the combination of elements is uniquely challenging or

difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C.

103(a). Ex Parte Smith, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing KSR, 127 S.Ct. at 1740,

82 USPQ2d at1396. Accordingly, since the applicant[s] have submitted no persuasive evidence

that the combination of the above elements is uniquely challenging or difficult for one of

ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is

no more than the predictable use of prior art elements according to their established functions

resulting in the simple substitution of one known element for another or the mere application of a

known technique to a piece of prior art ready for improvement.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over de Jong-

HD_Speed-Riedel in view of CD Speed 2000.

Re claim 22, de Jong -HD_Speed-Riedel substantially discloses a system as set forth in

claim 1 above. de Jong -HD_Speed-Riedel does not explicitly disclose wherein the drive

information further comprises an error rate of the data access drive. CD Speed 2000 discloses

the drive information further comprises an error rate of the data access drive (See Page 1 which

states that errors can be measure with some recorders). It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify de Jong -HD_Speed-Riedel with

the teachings of CD Speed 2000 and include the error rate of the data access drive with the

motivation to provide the user with better tools to diagnose a potential data drive problem.

Response to Arguments

Applicant's arguments filed on 11/23/2011 have been fully considered but they are not

persuasive.

Applicant's arguments focused following:

A) Whether de Jong teaches a computer readable program code?

A) De Jong teaches this limitation because it teaches a client software, a readable

program code, that generates driver information and user interface rendering data. (see De Jong,

col. 6, lines 20-30)

B) Whether the combination of de Jong, and Riedel teaches executing computer-readable

program code by a drive controller at a data access drive to generate user interface rendering

data?

B) The combination teaches this limitation because De Jong teaches a client software, a

readable program code, that generates driver information and user interface rendering data. (see

De Jong, col. 6, lines 20-30) and Riedel teaches executing application specific code at storage

device of client to improve application I/O performance. (see Riedel, page 1. paragraph 1)

Therefore, the combination teaches executing computer-readable program code by a drive

controller at a data access drive to generate user interface rendering data.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The

examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke
/Peng   Ke/
Primary Examiner, Art Unit 2174